

Remarks:

Applicant appreciatively acknowledges the Examiner's confirmation of receipt of Applicant's claim for priority and certified priority document under 35 U.S.C. § 119(a)-(d).

Reconsideration of the application is respectfully requested.

Claims 1 - 22 are presently pending in the application.

In item 2 of the above-identified Office Action, claims 1 - 2, 5, 7 - 8 and 10 - 22 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 6,058,844 to Niemiec ("NIEMIEC") in view of U. S. Patent No. 4,508,033 to Fischer ("FISCHER") and U. S. Patent No. 3,875,682 to Justus et al ("JUSTUS"). In item 3 of the Office Action, claims 3 - 4 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over NIEMIEC in view of FISCHER and JUSTUS, and further in view of U. S. Patent No. 6,550,390 to Frankenberger ("FRANKENBERGER"). In item 4 of the Office Action, claims 6 and 9 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over NIEMIEC in view of FISCHER and JUSTUS, and further in view of U. S. Patent No. 5,913,471 to Makosch et al ("MAKOSCH").

Applicant respectfully traverses the above rejections.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 recites a **printing material web processing machine** including, among other limitations:

"a pull roll disposed downstream of said dryer for conveying the web along the path with a given tensile stress;" [emphasis added by Applicant]

Applicant's independent claim 7 recites a **printing material web processing machine** including, among other limitations:

"a first pull roll disposed downstream of said dryer to convey the web along the path with a given tensile stress;" [emphasis added by Applicant]

In the Office Action, it is stated on page 2, that:

"With respect to claims 1, 5, 7 and 10 - 15, Niemiec teaches a printing material web processing machine, in the form of a driven, rotating element, **for printing a web, 14**; a dryer 18, disposed downstream of said press cylinder, said dryer guiding the web along a path; and **a first pull roll 20, which is a driven, rotating cooling roll, disposed downstream of said dryer** for conveying the web along the path with a given tensile stress." [emphasis added by Applicant]

Applicant respectfully disagrees with the characterizations of the teachings of the **NIEMIEC** reference in the Office Action.

First, the chiller rolls 20 in **NIEMIEC**, alleged in the Office Action to be analogous to the pull roll downstream of the dryer of Applicant's claims 1 and 7, are, in fact, **not pull rolls**. The rollers 20 of **NIEMIEC** are solely, a known type of

**chill rollers.** See col. 3 of **NIEMIEC**, lines 63 - 67, which states:

"A plurality of internally cooled chiller drums or **chill rolls 20** are provided in sufficient number and size and with **peripheral surfaces cooled to a sufficient degree to cool the web down to about 90° F.** before the printed web is delivered to station 22 for further processing." [emphasis added by Applicant]

Although in the prior art, it is usually known that at least one of the chill rollers is a **driven** roller, chill rollers are usually not designed to pull the web through the dryer without employing a further nip roller upstream of the chill roll section in order to obtain the necessary web tension within the dryer and the chill roll section, which makes the web contact the chill surfaces of the chill rollers in order to cool down the web heated up in the dryer.

In reviewing the **NIEMIEC** reference, **NIEMIEC** neither teaches, nor suggests, using the **chill rollers 20** **to pull the web**, especially since the web tension required to separate the web from the blanket cylinder of the last printing unit downstream of the dryer is necessarily **much higher** than the tensile force which can be provided by the chill rolls 20 of **NIEMIEC**. As such, the **NIEMIEC** reference fails to teach or suggest Applicant's pull roll disposed downstream of the dryer, of claims 1 and 7, and nothing in **NIEMIEC** would motivate a person of skill in the art to use the chill rollers as pull rolls,

absent impermissible hindsight reconstruction of Applicant's particularly claimed invention.

Further, Applicant's claim 1 additionally recites, among other limitations:

"a second apparatus for driving said pull roll, said second apparatus driving said pull roll at a rotational speed being reduced as compared with a rotational speed of said press cylinder." [emphasis added by Applicant]

Applicant's independent claim 7 similarly recites, among other limitations:

"an apparatus for driving said first pull roll, said apparatus driving said first pull roll at a rotational speed being reduced as compared with a rotational speed of said second pull roll." [emphasis added by Applicant]

Applicant's independent method claim 14 recites, among other limitations:

"feeding a web to a press cylinder under a first tensile stress;

printing on the web using the press cylinder;

conveying the web along a drying path;

separating the web from the press cylinder; and

setting a second tensile stress of the web, being reduced as compared with the first tensile stress, along the drying path." [emphasis added by Applicant]

Applicant's claimed relative speeds of claims 1 and 7 are related to the relative tensile stresses claimed in claim 14, as described in the specification of the instant application, page 20, lines 1 - 9, which states:

"Given appropriately selected rotational speed relationships, the tensile stress along the drying path 7 can be lower than the tensile stress upstream of the printing unit 5 (in a printing path). In particular, the tensile stress along the drying path 7 can be considerably lower than a conventional tensile stress in a printing path, for example in the region of about 10%." [emphasis added by Applicant]

Nothing in the NIEMIEC reference teaches or suggests Applicant's particularly claimed relative speeds of claims 1 and 7 or relative tensile stress of claim 14. More particularly, NIEMIEC doesn't teach that the speed, and resultantly the tensile stress, arguendo, at the chill rollers 20 would be less than the speed/tensile stress at the press cylinder.

Further, a person of skill in the art, absent impermissible hindsight reconstruction, would not, reading NIEMIEC know to reduce the drive speed of the chill rolls compared to the rotational speed of the press cylinder, thus obtaining the relative speeds/tensile stresses of Applicant's claims. Rather, a person of skill in the art, absent impermissible hindsight reconstruction of Applicant's claimed invention, would consider it necessary to drive a pull roll at a

higher speed than the press cylinder in order to maintain a web tension in the dryer at a level of the prior art, which is about ten times higher than web tension of the present invention.

The failure of **NIEMIEC** to teach or suggest Applicant's claimed invention is additionally supported in the Office Action, on page 2, which states:

"Niemic does not teach a second pull roll, in the form of a driven, rotating element, disposed downstream of said press cylinder and upstream of said dryer for separating the web from said press cylinder; or a second apparatus for driving said pull roll, said second apparatus driving said first pull roll at a rotational speed being reduced as compared with a rotational speed of said press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder."

As such, **NIEMIEC** neither teaches, nor suggests, Applicant's claimed invention. Rather, in the Office Action, it is alleged that **NIEMIEC**, in combination with **FISCHER** and **JUSTUS**, can be used to render Applicant's claimed invention obvious. More particularly, it is alleged in the Office Action, on page 3, that "Fischer teaches a printing press having a pull roll 14, 15, which is a driven, rotating element, disposed downstream of a press cylinder, 5, and upstream of a dryer, 9, for separating the web from the press cylinder". With regard to **JUSTUS**, it is alleged on page 3 of the Office action that

"Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder".

However, Applicant believes, that the NIEMIEC, FISCHER and/or JUSTUS references, are not combinable to teach or suggest Applicant's claimed invention of independent claims 1, 7 and 14. In the Office Action, it is alleged that the teachings of the JUSTUS reference, including a web catcher device, as taught in FISCHER, could be combined with NIEMIEC to render obvious Applicant's independent claims 1, 7 and 14, as well as other claims. Applicant respectfully disagrees. First of all, Applicants claims are limited to a printing material web processing machine (claims 1 and 7) or a method for treating a printing material web in a printing material web processing machine (claim 14), and thus, to a printing press. However, the teachings of JUSTUS are solely related to a dryer in a paper-making machine. Accordingly a person skilled in the art would not consider the teachings of the paper-making art, when attempting to improve the printing quality in a web fed printing press. As such, the teachings of the JUSTUS reference are believed by Applicant to be non-combinable with that of NIEMIEC and/or FISCHER. This is especially true

because, the roller 16 of FIG. 1 of JUSTUS is a roller which is driven at a speed varying from 50 to 100 percent of the speed of the unprinted paper web traveling through the paper-making machine, and thus, is only used for the purpose of contacting the web to prevent flutter. However, were the roller 16 of JUSTUS to be installed in the cooling section of NIEMIEC, the teachings of JUSTUS would inevitably lead to a smearing of the freshly printed web of NIEMIEC without even reducing the web tension in the dryer. As such, a person skilled in the art would definitely not combine the teachings of JUSTUS with the teachings of NIEMIEC and/or FISCHER. In view of the foregoing, Applicant's claimed invention of independent claims 1, 7 and 14 are believed patentable over the NIEMIEC, JUSTUS and FISCHER references.

Further, none of the other cited references make up for the limitations of the NIEMIEC, JUSTUS and FISCHER references, described above.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1, 7 and 14. Claims 1, 7 and 14 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 7 or 14. As it



is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.

In view of the foregoing, reconsideration and allowance of claims 1 - 22 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicant  
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